

Inter-Association Consensus Statement: The Management of Medications by the Sports Medicine Team



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The care of an injured or ill patient may be the responsibility of only 1 health care provider or a team of many providers. Depending on where the patient care is given and the patient receiving it, the sports medicine team can include athletic trainers (ATs), physicians, pharmacists, physical therapists, school nurses, and athletic training students. Various members of the sports medicine team may manage different medications in a variety of settings, making it necessary to follow proper protocols for storing, packaging, transporting, tracking, administering, and dispensing both over-the-counter (OTC) and prescription medications. It is essential that the sports medicine team remain in compliance with all current federal and state laws and institutional regulations concerning medication management in the sports medicine setting. This “Inter-Association Consensus Statement” can serve as a resource for all members of the sports medicine team and their affiliated organizations when reviewing best-practice guidelines for the management of medications in sports medicine facilities and other settings.

DESCRIPTION OF A SPORTS MEDICINE FACILITY

A *sports medicine facility* is a health care facility in which individuals receive treatment for illness or injury. The most common sports medicine facilities include but are not limited to the traditional athletic training facility, on-

site practice or game facilities, a treatment space within a performance venue, and ancillary facilities associated with travel (eg, bus, plane, hotel).^{1,2} The traditional athletic training facility typically serves as the primary health care location for those participating in secondary school and collegiate athletic programs and for professional sports teams. Local, state, and federal entities issue often-overlapping regulations and standards to ensure the quality of facilities from which health care services are delivered.³

OVERVIEW OF CURRENT FEDERAL AND STATE LAWS

The sports medicine team must be aware of federal and state regulations regarding the administration and dispensation of drugs (see definitions in following paragraph), as well as the regulations specific to each profession (eg, AT, physician, pharmacist, school nurse). Various federal agencies regulate how medication is dispensed and administered. For example, the Occupational Safety and Health Administration oversees concerns related to contamination of and exposure to hazardous drugs⁴; the Drug Enforcement Administration (DEA) enforces federal laws related to controlled substances⁵; and the Food and Drug Administration (FDA) regulates the “safety, efficacy, and security” of drugs, including appropriate labeling.⁶ All members of the sports medicine team should be mindful of additional laws and regulations set forth by various state regulatory boards (eg, state board of pharmacy, state board

^a The additional members of the task force are shown in Appendix A.

of medicine, state board of athletic training, or related governing boards).

All members of the sports medicine team must be cognizant of institutional, league, and team policies regarding medication management. For example, the National Basketball Association (NBA) prohibits physicians from delegating prescription drug–related responsibilities to a person (such as an AT in most circumstances) who is not authorized under the law to prescribe, dispense, or administer prescription drugs to a player (John P. DiFiori, MD, NBA Director of Sports Medicine, personal communication, September 27, 2017). Additionally, patient confidentiality must be protected according to existing laws governing patient privacy, such as the Family Educational Rights and Privacy Act in schools and the Health Insurance Portability and Accountability Act. The sports medicine team as a whole must ensure the appropriate management of prescription and OTC medications to safeguard patient health, safety, and confidentiality and avoid legal ramifications.

Administering, Dispensing, and Storing Medications

Drug *administering* refers to giving a single dose of medication for immediate use, whereas drug *dispensing* involves preparing, labeling, or providing multiple doses of a medication for future use.⁷ Current state and federal laws prohibit physicians from delegating the duty of prescription drug *dispensing* to providers not licensed to do so, including ATs.⁷ In some states, physicians can delegate the authority to dispense to nurse practitioners (NPs) and physician assistants. Certain states also permit ATs limited designation to administer medications.⁸ Some states require prescribers to register with a regulatory agency, such as a state board of pharmacy, to dispense controlled or noncontrolled medications (or both). Prescribers who are only administering a medication do not have to register with the board. Due to the variability in state laws, it is imperative that all members of the sports medicine team be aware of the regulations in the state(s) in which they practice.

Federal law requires any facility that receives, stores, administers, or dispenses controlled substances to maintain a valid DEA registration.⁹ However, a DEA registration is not necessary for dispensing noncontrolled substances (such as oral antibiotics), provided the medications are properly labeled and packaged.⁸

Transporting Medication Across State Lines

Currently, physicians cannot travel across state lines with controlled substances, regardless of licensure exemption by the destination state.⁸ Per National Collegiate Athletic Association (NCAA) guidelines, physicians can prescribe and dispense a prescription to an individual patient before travel or coordinate with the host team's medical staff to prescribe and dispense a controlled substance if needed.¹⁰

Congress failed to pass the Medical Controlled Substances Transportation Act of 2011, but in March of 2017, a similar bill was introduced to help provide patients, including athletes on traveling teams, with improved medical care. The Medical Controlled Substances Transportation Act of 2017 would allow physicians to travel with controlled substances out of state for up to 72 hours, as long as the physicians have separate DEA registrations and proper records are kept indicating medication types and

administration details.^{10,11} When traveling internationally, a practitioner must be mindful not only of US laws (including DEA and FDA regulations relating to imports and exports) but also of the laws of the country or countries to which the practitioner is traveling.^{9,12}

THE SPORTS MEDICINE TEAM

Team Physician

A *team physician* is a licensed medical doctor or doctor of osteopathic medicine who provides regular medical coverage to a team of athletes. Individual states control the practice of medicine by regulating a physician's ability to prescribe medications and a pharmacist's ability to fill them. However, controlled substances are primarily regulated by the federal Controlled Substances Act in Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970. When federal and state laws conflict, the more restrictive law should be followed. For example, as of 2017, all 50 states, plus the District of Columbia and Guam, have enacted some form of a prescription drug-monitoring program for controlled substances; the physician must comply with these programs when prescribing the covered medications.¹³

- In general, physicians must be licensed in the state in which they are prescribing or have reciprocal prescribing privileges. The exception is military physicians writing prescriptions to be filled on a military base.
- Carrying drugs not prescribed to an individual patient across state lines may violate state law.
- Carrying controlled substances not prescribed to an individual patient is a federal felony.¹⁴ Thus, it is advisable that patients carry adequate amounts of prescription medications in their carry-on luggage.
- All prescriptions must be signed and dated on the day of prescribing (presigning blank prescription pads is illegal).
- Prescriptions for Schedule II controlled substances (eg, hydrocodone, oxycodone, amphetamine) cannot be refilled. Physicians can prescribe up to a 90-day supply of a Schedule II controlled substance, using multiple prescriptions to be filled sequentially, but with certain precautions (eg, written instructions on each prescription indicating the earliest refill date, review of additional state requirements).¹⁴ Prescriptions for Schedule III and IV controlled substances (eg, acetaminophen with codeine, lorazepam) may be refilled up to 5 times in 6 months, and for Schedule V substances (eg, cough syrup with codeine), as authorized by the prescriber. Other prescribers, such as NPs, may have additional restrictions (eg, only a 30-day supply), and the conditions under which they can prescribe controlled substances vary from state to state.¹⁵
- To call in or e-scribe a prescription, prescribers must be physically in a state in which they are licensed to practice medicine or in one that allows reciprocity. In 2012, only 18 states allowed out-of-state team physicians traveling with their teams to practice medicine with their home state medical license.¹⁶ However, the federal Sports Medicine Licensure Clarity Act,¹⁷ passed in 2018, now provides protection, both legal and malpractice, to team physicians, ATs, and other covered sports medicine professionals who travel with and provide care for their athletes across state lines.

- With the increasing use of telemedicine, physicians should be aware of the local and often complex laws governing the management of medications in this environment. As of March 2016, most states require an in-person evaluation for the physician to prescribe medication, whereas some allow the use of telemedicine to conduct an examination and subsequently prescribe medication.¹⁸ For example, Alaska strictly prohibits prescribing medication based solely on a telemedicine interview, but in Arizona, medications can be prescribed after a live telemedicine diagnostic interview and examination.¹⁸

Athletic Trainer

The AT is a health care professional who renders service or treatment under the direction of or in collaboration with a physician, in accordance with the physician's education and training, professional standards, and state statutes, rules, and regulations. As a member of the health care team, an AT provides services including but not limited to emergent care, injury and illness prevention and education, examination and clinical diagnosis, therapeutic intervention, and rehabilitation of injuries and medical conditions.¹⁹ The Board of Certification, Inc, certifies ATs through a national credentialing program.

Unless explicitly authorized by individual state practice acts, ATs cannot legally dispense prescription medications.²⁰ Therefore, ATs cannot dispense prescription medications even under standing orders or with permission from a physician, as this places both parties at risk for legal liability. Although dispensing cannot be delegated, ATs may be permitted to administer certain emergency prescription medications, such as epinephrine auto-injectors and naloxone, depending on their state practice acts. Athletic trainers should know how and when to use emergency medications and must follow state and federal laws and regulations concerning the legal administration of medications.

Per NCAA guidelines, all institutions that offer athletic programs should have an appointed or designated team physician.⁸ Institutions in the National Association of Intercollegiate Athletics, 2-year institutions, and secondary schools that offer athletics programs should enlist the services of a team physician to collaborate with the AT. The AT should follow the policies and procedures written in conjunction with the team physician and supported by the school administration.²¹

Other Providers

In addition to physicians and ATs, all health care providers must follow state and federal laws regarding the administering and dispensing of medications. For example, in school systems, most states allow the school's physician, school nurse, parent or guardian, and affected student to administer medication. Some states allow the school nurse to delegate the administration of medication to qualified individuals but may require an Individualized Health Care Plan or Emergency Care Plan on file for emergency administration of medications such as asthma inhalers and epinephrine auto-injectors.²² The majority of states require some form of waiver or release of liability from the minor student and parent or guardian.²³

MEDICATION IN ATHLETIC TRAINING CLINICAL SETTINGS

Athletic trainers work in a variety of clinical settings, each of which has unique circumstances concerning both OTC and prescription medications. For instance, ATs in professional sports may have league mandates regarding the availability of both OTC and prescription medications. The NBA requires home teams to have available, on-site in the team's arena, a supply of certain categories of prescription medications (noncontrolled substances) based on a standardized list and a designated 24-hour commercial pharmacy that can be conveniently accessed by visiting teams (John P. DiFiori, MD, personal communication, September 27, 2017). Athletic trainers working in emerging settings (eg, dance companies, acrobatic troupes, orchestras, and live theaters) may also be confronted with unique considerations, such as having appropriate locations for the storage and dispensing of medications.

The collegiate setting may share some characteristics with professional leagues, with the notable exception being that different sports have unique needs. For example, ATs may not travel with all teams and, consequently, there may be different channels for medication acquisition (eg, contacting the host AT or physician). The secondary school setting is unique in that the majority of patients are minors, and, in many states, this changes how the AT can practice. For example, in some states, an AT is not permitted to dispense or administer OTC medications to minors under any circumstance. Athletic trainers must understand all laws regarding medications in the states in which they practice. In addition, a full understanding of the local government laws and regulations remains important when traveling internationally with their patients.

Over-the-Counter Medication

The AT's roles and responsibilities vary based on the practice setting and state laws regarding the administering and dispensing of OTC medication. The AT should

- Understand the federal and state laws regarding OTC medication administration, dispensation, and storage.
- Know and understand the regulations regarding OTC medication and the athletic training practice acts in both the home state and states the AT may visit with patients.
- Act as a resource for questions or concerns about any OTC medication the patient is given. Therefore, the AT must possess a working knowledge of OTC medication actions, side effects, and interactions.
- Develop policies and procedures for maintaining safe storage and inventory of OTC medications. This includes appropriate documentation of any distributed OTC medications. A continued and pervasive lack of record keeping is both unsafe (in the event of a patient illness or a medication recall) and can indicate a disregard for established laws and guidelines.
- Understand the role of an *athletic training student*, who is a student enrolled in classes while matriculating through a Commission on Accreditation of Athletic Training Education-accredited professional education program. Current commission guidelines state that students must be supervised by a preceptor and must not replace professional athletic training staff or medical personnel.²⁴

Best practices, therefore, prevent a noncertified or unlicensed student from administering or dispensing OTC medications unless under direct supervision. This guideline should be outlined in the facility's policies and procedures.²⁴

- Understand the role of *student aides*, who may assist in sports medicine facilities but are not currently enrolled in an accredited athletic training program. Student aides should not be involved in administering or dispensing OTC medication.

Prescription Medication

As previously mentioned, ATs are not authorized to legally dispense prescription medication but may be permitted to administer emergency medication under specific conditions (eg, emergency administration of epinephrine and naloxone is allowed in many states). Athletic trainers should consult their home state's regulations concerning the administration of emergency medication. An AT's potential responsibilities may include the following:

- As directed by a physician and per established medication policies and procedures and state and federal legislation, the AT may act as a liaison with a licensed pharmacy to order and ensure the safe storage of prescription medication in the sports medicine facility, including any medication stored in a secured physician's bag or case designated for team travel.
- Development of policies and procedures for safely administering, dispensing, storing, and inventorying prescription medication in the sports medicine facility in consultation with a physician or pharmacist (or both).
- Development of policies and procedures for administering certain emergency prescription medications (eg, epinephrine, naloxone). These policies and procedures should be reviewed annually, as laws may change frequently. For instance, Oregon law previously allowed nonlicensed entities to store and administer naloxone for use in the event of an opioid overdose but mandated that the person administering naloxone undergo formal training. However, as of January 1, 2018, special training is no longer required to obtain naloxone in Oregon.²⁵

Sample Medications

Drug manufacturers sometimes supply samples of prescription and OTC medications. Certain institutions prohibit the acceptance of sample medications, but if they are permitted, they should be handled in the same manner as purchased OTC and prescription medications. Documentation should include transfer of the samples from the pharmaceutical representative to physician and then into inventory and should include the lot number and expiration date.²⁶

ROLES AND RESPONSIBILITIES

Team Physician

The team or institution's physician or a patient's personal physician may prescribe medication. The physician is ultimately responsible for ensuring that records and inventory are maintained and reviewed for all prescriptions

distributed from or stored at the sports medicine facility or related location. This record-keeping requirement includes sample medications. The efficacy of sample medications is debated, and their use has been prohibited in many hospital systems. Both the Accreditation Association for Ambulatory Health Care and the Joint Commission, 2 organizations that accredit many collegiate student health centers and hospitals, have developed specific standards that must be followed for the use of sample medications.^{27–29} The physician must also supervise the disposal of expired medications and should review all protocols for the distribution of OTC medications. Although the elite competitive athlete is ultimately responsible for avoiding prohibited medications and obtaining therapeutic-use exemption waivers, the physician should be familiar with medications banned or restricted by any relevant sport governing body. Additional resources are provided at the end of this document.

Athletic Trainer

As stated previously, drug *administering* is giving a single dose for immediate use, whereas drug *dispensing* involves preparing, packaging, and labeling of multiple doses of a medication for future use. For OTC medication, *dispensing* involves providing multiple labeled unit-dose packages of an OTC medication for future use. A *formulary* is a list of medications used by a health care entity and is important for ATs to have when they travel with individuals and teams.

Although there is widespread belief that ATs are not permitted to dispense OTC medication, it is challenging to find regulations prohibiting this practice. Ultimately, the decision to dispense OTC medication is dictated by existing state laws and practice acts and by written policies and procedures established in consultation with the supervising or collaborating physician. It is important to document all dispensed OTC medications. The Board of Certification has published *Guiding Principles for AT Policy and Procedure Development*,³⁰ which provides further guidance to ATs on this matter.

Director of Sports Medicine

The director of sports medicine may have different professional titles and degrees, but the role in monitoring prescription and OTC medications in the sports medicine facility or other locations varies little. The director's responsibilities should focus primarily on appropriate documentation. Examples include maintaining current DEA certification for each controlled substance prescriber, as well as for every location where controlled substances are stored, and letters confirming the medical need for otherwise banned substances.

If the director of sports medicine is not a physician, the supervising physician should be active in the development of written policies and procedures outlining the dispensing of medication. Documentation of the annual review of these policies and procedures by all members of the sports medicine team should be kept on file and retrievable for a minimum of 3 years.^{26,31} The supervising physician should approve and sign the policies and procedures if required by state law.

The NCAA requires that its member institutions have an *athletics health care administrator* to oversee health care

management and delivery and to serve as the communication link between the athletic administration and the sports medicine staff. This position is not necessarily synonymous with the director of sports medicine but may be, depending on each institution's structure.⁸

Pharmacist

A *pharmacist* is a health care professional licensed by the state to ensure proper use of medications. Pharmacists are responsible for interpreting and evaluating medication orders; compounding, dispensing, and labeling prescription drugs; properly and safely storing drugs; maintaining proper records; and controlling pharmacy goods and services. The pharmacist also consults with patients receiving medication to ensure their understanding of proper dosing and precautions associated with the medication. Larger organizations, such as collegiate and professional sports programs, may choose a pharmacist to assist with their medication programs in their sports medicine facilities.

Patient

All patients should be given precise instructions on all medications received. Student-athletes should consult the team physician if prescription medication is necessary. The athlete is ultimately responsible for avoiding any prohibited medication and obtaining therapeutic-use exemption waivers. If the patient is a minor, those responsible for administering medication should be knowledgeable about state laws. For example, in Illinois, prescription and OTC medications fall into the same category: both require an order from a licensed provider as well as a written request by the minor's parent or legal guardian.³² In Michigan, physician-directed protocols may permit OTC medication to be dispensed without an order; annual consent from a parent or legal guardian for use of established medication protocols is required to administer medication in schools.³³

Other

The roles of other personnel who may be present in the sports medicine facility, such as coaches, clinical administrators, or advanced practice providers (eg, NPs or physician assistants), should be defined by the policies and procedures of the institution and state licensure acts and regulations. Personnel who are not involved in a patient's medical care should never have access to medication stored in the sports medicine facility.

RECOMMENDATIONS AND BEST PRACTICES

Chain of Command

A health care professional who is licensed to assess, evaluate, diagnose, prescribe, administer, and dispense medication may do so according to respective license and state and federal laws. Dispensing by a health care professional may require registration with the state board of pharmacy. Nonlicensed medical personnel may forward an order on behalf of a physician, receive and stock OTC inventory, acquire and dispose of records, and perform audits and reconciliations. The DEA rules for the disposal

of controlled substances should be followed, and FDA guidelines should be followed for the disposal of all other medications.

Storage Location of Medications

All prescription medications must be secured at all times in a locked cabinet or locked physician's bag that is environmentally controlled (dry temperature of 68°F to 77°F [20°C to 25°C]). Controlled substances must be stored in a separate locked cabinet or in a locked physician's bag in compliance with state laws and must be accessible only by medical personnel with a DEA registration.³⁴ Over-the-counter medications should be stored in a locked cabinet that is only accessible by the physician, AT, and other appropriate personnel. The OTC medications should not be stored with prescription medications in the same secure location because ATs should not have access to prescription medications. Personnel should only be allowed to access, stock, procure, or otherwise handle prescription medications according to their professional practice standards and guidelines.¹

Storage and labeling of sample medications must follow the same guidelines used for OTC and prescription products. Sample medications must be kept in a secure location and documented when dispensed; expired samples must be disposed of properly. Team physicians are responsible for the security of the medications in their travel bag or locked cabinet in the sports medicine facility. It is very important to verify specific state laws regarding these practices. The institution's policies and procedures manual should clearly define medication safety and security protocols.

Packaging and Labeling of Prescription Medications

All medications should be packaged in childproof containers. Prescription ointments, creams, and inhalers should be individualized for each patient when dispensed. The pharmacist should label the medications with the following information³⁵:

1. Name and location of facility
2. Physician's name
3. Date
4. Name of medication
5. Strength
6. Quantity
7. Directions
8. Manufacturer
9. Expiration date of medication
10. Lot number of medication
11. Appropriate cautionary statements

An alternative source for medications would be a pharmacy service that provides individually packaged medications along with an inventory control sheet that is scanned when the medication is dispensed. These companies may be licensed with their states as drug manufacturers and registered with the DEA and FDA as drug manufacturers and repackagers.

Packaging and Labeling of OTC Medications

Over-the-counter medications must be in unit-dose packaging that contains the following information³⁶:

1. Product's active ingredient, including the amount in each dosage unit
2. Purpose of product
3. Use (indications) for product
4. Specific warnings (eg, situations when the product should not be used under any circumstances, common side effects, and when to consult a physician)
5. Dosage instructions, such as route of administration and frequency of use
6. Inactive ingredients
7. Other information (eg, storage)
8. Questions or comments
9. Phone number (for further information on product)

Over-the-counter medication should never be repackaged. Repackaging carries concerns of accountability, contamination, and liability under federal and local laws. Properly labeled unit-dose packaging is the preferred packaging method for OTC medications.

Note: One example of an additional regulation for OTC medication is the Combat Methamphetamine Epidemic Act of 2005, which regulates sales of OTC cold medications containing the ingredient pseudoephedrine.³⁷ The amount of pseudoephedrine an individual can purchase each month is limited, and individuals are required to present photo identification to purchase products with pseudoephedrine.³⁷ If a patient needs pseudoephedrine, it is recommended that the physician issue a prescription for the medication or dispense pseudoephedrine that is prepackaged by the pharmacist or pharmacy service.

Administering and Dispensing of Medications

Athletic trainers are not allowed to prescribe or dispense prescription drugs. Athletic trainers may administer OTC medications in minimal quantities, under practice protocols, subject to the rules of their respective institutions and any applicable state regulations. Regulations for administering OTC medications to minors versus adults often differ. Health care professionals who dispense should follow the regulations that their state board of pharmacy has set forth when dispensing medications, such as providing patient education information.³⁸

Documentation

Prescription medication use should always be recorded in the patient's medical record and documented when administered at or dispensed from the sports medicine facility, per the policies and procedures manual. It is important to refer to state laws regarding record retention. Records on controlled substances and OTC medications should be kept for a minimum of 2 years. However, some state laws may require a longer retention period.³⁹ Records should also be kept of all OTC medications given to patients, including the date, name of patient, medication, quantity, and name of the person who administered or dispensed the medication.

Auditing and Inventory Control

Once the prescription medication is prepared and inventoried, the medication then becomes the responsibility of the physician. The team physician and pharmacist should develop a formulary of medications to be kept in the

physician's bag or locked cabinet in the sports medicine facility. The pharmacist or physician is responsible for executing a regular medication audit. If the physician who dispenses the medication is the same person who is auditing the facility, it is best practice to have an AT, pharmacist, or another sports medicine team member verify the audit. The physician's bag or locked cabinet in the sports medicine facility should contain a list of the medications and a record of the date, patient, medication, and quantity dispensed by the physician. At the time of the audit, the list of medications should be reconciled and, if needed, medications can be ordered or restocked.

Emergency Applications

It is important for all members of the sports medicine team to be aware of the current laws on possessing, dispensing, and administering medications intended for emergency applications. Different laws guiding storage and administration may govern epinephrine, naloxone, beta-agonist inhalers, glucagon, oxygen, and other medications. Following are 2 examples:

- Epinephrine: In Virginia, schools are required to stock non-student-specific epinephrine to be used on any student believed to be experiencing an anaphylactic reaction. In Arizona, the student's name must appear on the prescription label attached to the medication. In New Jersey, the school nurse can designate employees who volunteer to administer the medication, whereas in Ohio, school administrators must complete a drug-administration program before dispensing.²³
- Oxygen: Per the 1997 FDA guidelines, oxygen devices intended for emergency use may be marketed for OTC distribution, as long as they deliver a minimum flow rate of 6 L/min for at least 15 minutes. Oxygen devices that do not meet these criteria may not be labeled for emergency use, and federal law prohibits dispensing them without a prescription.⁴⁰

The institution's policies and procedures manual and emergency-planning documents should define the approved use of emergency medications. These documents should include the location of emergency medications and list those who can lawfully administer the medications. Patients should be in possession of their own prescription medications when traveling. Third parties should not carry prescription medications designated for another person, particularly if they contain controlled substances.⁴¹ It is a common practice for patients to give emergency medication to ATs to hold during practices, competitions, and performances.

Phonophoresis and Iontophoresis

In many states, ATs are permitted to administer and store topical prescription medication to be delivered via phoretic means. This exception to administering medication generally requires a written prescription from the treating physician, and the medication must be labeled appropriately with the physician's name, medication name and strength, manufacturer, and expiration date.⁴² Prescription medication such as dexamethasone used for iontophoresis should be prescribed specifically to the patient receiving

treatment, and the details should be noted in that patient's daily treatment log and record.

Compounded drugs, such as phonophoresis gel, are made for patients with specific needs for whom an FDA-approved drug is inappropriate or unavailable; compounded drugs are not FDA approved. The Drug Quality and Security Act requires pharmacies that compound medications for bulk use (without the need to obtain patient-specific prescriptions) to meet certain requirements and be registered with the FDA as outsourcing facilities.³⁵ Traditional compounders still have the requirement for drugs to be compounded based on receipt of a valid patient-specific prescription. Documentation requirements vary from state to state but, at minimum, need to include the name of the patient, date of treatment, referring physician, type of treatment, and specific medication dosage.

Team Travel

Travel necessitates additional considerations for the physician and AT. The majority of sports teams, with the exception of football, travel without a physician and, in some cases, without an AT. Travel may be out of state, and different state laws may apply. The Sports Medicine Licensure Clarity Act¹⁷ of 2018 provides protection, both legal and malpractice, to team physicians, ATs, and other covered sports medicine professionals who travel and provide care for their athletes across state lines. However, this federal law does not supersede any reciprocity or interstate compact agreement already in effect between states.¹⁷ Traveling with prescription and OTC medications is often convenient and desirable but may be contrary to federal and state laws. To minimize liability,

- Thoroughly review current federal and state laws regarding the transportation of medication. For example, it is currently illegal for anyone other than the patient to carry controlled prescription medication across state lines (eg, hydrocodone, medications for attention-deficit hyperactivity disorder).¹¹
- Have a written formulary (signed by the team physician) of all medications being transported that includes the medication name, indications for use, and recommended dosing. Contact information for the team physician should be detailed with the formulary.
- Ensure the safe storage of the transported medications, both at home and off-site. At home, the medications should be stored with medications that do not accompany the traveling team (eg, locked cabinet). On the road, the container for the medication should be assessed for security (eg, the physician's bag should lock).
- Best practices indicate that using a local pharmacy at the travel site, with the team physician phoning in a prescription, is ideal. Many states, such as Oregon, allow physicians or authorized providers to phone in prescriptions if they are licensed in their home state, are practicing within their scope, and have a valid patient-prescriber relationship.⁴³ The host-site medical staff may be able to facilitate this process.
- Be aware that international travel may require additional steps to satisfy different countries' laws and customs. According to the International Narcotics Control Board, most countries regulate psychotropic and narcotic medication, allowing a patient with a prescription or

letter from the prescribing physician to possess only a 30-day supply.¹⁸

Disposal

Pharmaceutical (hazardous) waste must be disposed of in compliance with organizational, local, state, and federal guidelines. This usually means disposal with a licensed hazardous waste-disposal agent. In general, items should not be placed in the regular trash or flushed down a sink or toilet. Pharmaceutical (hazardous) waste products may include

- Expired medications
- Partially used intravenous solutions and tubing with medication additives
- Partially used medication glass vials
- Unused iodine preparations and chlorhexidine preparations
- Medicated ointments and cream tubes
- Unused silver nitrate sticks

Disposal of controlled substances requires additional considerations (eg, controlled substances can be especially harmful if taken accidentally by someone other than the patient and should not be thrown in the trash where a child or pet could access the medication). If a DEA-authorized collector or drug take-back program is not available, the FDA recommends that these medicines be disposed of by flushing when no longer needed.⁴⁴

CONSEQUENCES OF NONCOMPLIANCE

The consequences for noncompliance with the appropriate management and administration of medications in sports medicine facilities range in severity. Both state and federal laws as well as DEA regulations can be used to determine noncompliance and any resulting penalties or discipline.

In the late 1990s, a legal case regarding the suicide death of a collegiate student-athlete alleged that he was given prescription pain medication in violation of federal drug-dispensing laws.⁴⁵ An investigation revealed that controlled drugs were kept in unlocked metal cabinets, freely accessible to the athletes. Further, packets of these prescription medications with no instructions or warnings were dispensed by ATs without authorization or physician orders. The ATs pleaded guilty to dispensing federally controlled drugs without prescriptions, and the athletic department was assessed a \$100 000 civil penalty for violating the federal Controlled Substances Act.

Additional consequences beyond state and federal laws may be levied by the practitioner's respective board of certification and state licensure board. For instance, as a result of a late 1980s case in which a pharmacist, physician, and AT were all charged with criminal offenses related to the improper provision and prescription of medications to student-athletes, the Ohio Board of Pharmacy began to require that all sports medicine facilities dispensing prescription medications be licensed by the state board.⁴⁶ This policy change also allowed unannounced inspections of the facility.

Improper management of medication has been documented in a variety of sports medicine settings. Collegiate

ATs and athletic training students have been noted to dispense medication, improperly administer medication, and fail to appropriately document drug administration and dispensation.^{31,47} Kahanov et al³¹ found that fewer than half of collegiate ATs surveyed were administering OTC medication in single-dose packets, which is a best practice, and that one-third of these collegiate ATs did not document the use of OTC medication. In 2014, the DEA launched unannounced inspections of traveling National Football League teams based on suspicions of teams dispensing medications without labels and ATs dispensing prescription medications.⁴⁸ Sports medicine team personnel face severe consequences if not cognizant of and compliant with all current laws and regulations regarding medications.

This consensus statement is not legal advice but rather a guideline for best practices and a tool to help avoid foreseeable consequences. Ultimately, the team physician is responsible for prescribing medications and the party liable and punishable for any illegal acts, including those of the AT or other medical staff members.

AVOIDING OPIOID MISUSE AND ABUSE

Opioid medication for pain control should be used judiciously. Because opioid medications are associated with a significant risk of accidental overdose, especially when used in combination with sleep aids, benzodiazepines, or alcohol, they should be avoided when possible. Extended-release or long-acting formulations should not be used for acute injuries. Nonsteroidal anti-inflammatory medications, such as ibuprofen or naproxen, can be quite effective for managing pain, especially that associated with inflammation.⁴⁹

Patients should understand that opioids are for time-limited use only, with 2 to 3 days' of medication often being sufficient. The risks and dangers of the medication must be communicated in detail and the medication prescribed at low doses and in small quantities. When patients are being considered for opioid medication, including before surgery, they should be screened for substance abuse, depression, and other psychiatric disorders.^{50,51}

Multiple states have passed legislation or adopted guidelines regarding the prescribing of opioid medications. For example, in 2017, North Carolina passed the Strengthen Opioid Misuse Prevention bill, which defined *acute pain* as pain, whether resulting from disease, accident, intentional trauma, or other cause, that the practitioner reasonably expects to last for 3 months or less.⁵² It set a 5-day limit for any Schedule II or Schedule III opioid or narcotic to manage acute pain and a 7-day limit for postoperative pain relief.

CONCLUSIONS

One or more individuals on the sports medicine team may make decisions pertaining to the management of OTC and prescription medications in the sports medicine facility. Appropriate decision makers include the designated team physician, head AT, director of sports medicine, designated athletic health care administrator, or an administrative body (eg, the athletic department, school health services, school district, professional sports team front office, local hospital or health care system, or a combination of these). State and federal statutes and regulatory agencies determine medica-

tion-management policies. Therefore, the recommendations of this consensus statement are not mandates but guidelines for creating individualized policies and procedures for specific sports medicine teams and facilities. Written policies and procedures will demonstrate that due diligence was exercised to involve and educate all concerned parties, and that all personnel have established guidelines to reference when managing medication in the sports medicine setting. Additional resources for developing these policies and procedures are listed in Appendix B.

DISCLAIMER

The Writing Group and the Inter-Association Task Force developed this consensus statement to encourage individuals, schools, sports medicine facilities, organizations, and institutions to consider carefully and independently each of the recommendations. The information contained in this statement is neither exhaustive nor exclusive to all circumstances or individuals. Variables such as institutional human resource guidelines and state or federal statutes, rules, or regulations may affect the relevance and implementation of these recommendations, and references to laws and practice acts are assumed to be current at the time of this document's publication. Individual professions may have also developed a best-practices document addressing medication use.

The NATA, the American Medical Society for Sports Medicine, and the Inter-Association Task Force advise individuals to carefully and independently consider each of the recommendations' applicability to any particular circumstance or individual. The statement should not be relied on as an independent basis for care but rather as a resource available for all to use. Moreover, no opinion is expressed herein regarding the quality of care that adheres to or differs from any of NATA's position statements. The NATA, the American Medical Society for Sports Medicine, and the Inter-Association Task Force reserve the right to rescind or modify this statement at any time.

Appendix A. Additional Task Force Members^a

Name	Organization
Bob Howard, ATC	National Athletic Trainers' Association
Jeff McKibbin, MEd, LAT, ATC	National Athletic Trainers' Association
Molly G. Paturzo, MEd, ATC	National Athletic Trainers' Association
Chris Snoddy, MA, LAT, ATC	National Athletic Trainers' Association
Alice Wilcoxson, PhD, ATC, PT	National Athletic Trainers' Association
Rick Burkholder, MS, ATC	Professional Football Athletic Trainers' Society
Mitchell L. Cordova, PhD, ATC, FNATA	Association of Schools of Allied Health Professions
Steve Donohue, ATC	Professional Baseball Athletic Trainers' Society
Myles Hirayama, ATC	Professional Hockey Athletic Trainers' Society
Lisa Kern, MSN, RN, NCSN	National Association of School Nurses
Scott Rodeo, MD	American Orthopaedic Society for Sports Medicine
Joe Sharpe, LAT, ATC	National Basketball Athletic Trainers' Association

^a This statement has been endorsed by the American College Health Association, American Medical Society for Sports Medicine, American Orthopaedic Society for Sports Medicine, Association of Schools of Allied Health Professions, National Athletic Trainers' Association, National Basketball Athletic Trainers' Association, Professional Baseball Athletic Trainers' Society, and Professional Hockey Athletic Trainers' Society.

Appendix B. Additional Resources

- 2018–2019 Banned drugs list. National Collegiate Athletic Association Web site. <http://www.ncaa.org/2018-19-ncaa-banned-drugs-list>. Accessed September 6, 2018.
- Koller DL. Team physicians, sports medicine, and the law: an update. *Clin Sports Med.* 2016;35(2):245–255.
- Legal interventions to reduce overdose mortality: naloxone access and overdose. Good Samaritan laws. Network for Public Health Law Web site. www.networkforphl.org/_asset/qz5pvn/legal-interventions-to-reduce-overdose.pdf. Accessed September 6, 2018.
- Middlemas DA. Medications in the athletic training setting. DocPlayer Web site. <https://docplayer.net/87371739-Athletic-training-setting.html>. Accessed September 6, 2018.
- Opioid prescribing in college health. American College Health Association Web site. https://www.acha.org/documents/resources/guidelines/ACHA_Opioid_Prescribing_in_College_Health.pdf. Accessed September 6, 2018.
- Epinephrine auto-injector law. Tennessee Department of Health Web site. <https://www.tn.gov/health/health-program-areas/epinephrine-auto-injector-law.html>. Accessed September 6, 2018.
- US Anti-Doping Agency Web site. <https://www.usada.org>. Accessed October 28, 2018.
- World Anti-Doping Agency Web site. <https://www.wada-ama.org>. Accessed October 28, 2018.

REFERENCES

1. Drugs and sports. In: Prentice WE, Arnheim D, eds. *Arnheim's Principles of Athletic Training*. 15th ed. Dubuque, IA: McGraw-Hill; 2013.
2. Cummings N, Stanley Green S, Higgs P. *Perspectives in Athletic Training*. Amsterdam, The Netherlands: Elsevier Health Sciences; 2008.
3. Diehl J, Kinart C, Cohen R, et al. *BOC Facility Principles*. Revised ed. Omaha, NE: Board of Certification; 2015.
4. Hazardous drugs. Occupational Safety and Health Administration Web site. www.osha.gov/SLTC/hazardousdrugs. Accessed February 4, 2017.
5. Mission statement. US Drug Enforcement Administration Web site. www.dea.gov/about/mission.shtml. Accessed February 4, 2017.
6. What we do. Food and Drug Administration Web site. www.fda.gov/aboutfda/whatwedo. Accessed February 4, 2017.
7. Parsons J, ed. *2017–2018 NCAA Sports Medicine Handbook*. 26th ed. Indianapolis, IN: National Collegiate Athletic Association; 2017.
8. Kaeding CC, Borchers J. Issues for the traveling team physician. *J Knee Surg.* 2016;29(5):364–369.
9. Home. US Drug Enforcement Administration Web site. www.dea.gov/index.shtml. Accessed February 12, 2017.
10. Carlson C. Traveling with medication. NCAA Sports Science Institute Web site. www.ncaa.org/sport-science-institute/traveling-medication. Published 2015. Accessed February 12, 2017.
11. Medical Controlled Substances Transportation Act of 2017, H.R. 1492, 115th Cong (2017). <https://www.congress.gov/bill/115th-congress/house-bill/1492/text>. Accessed October 28, 2018.
12. Home. US Food and Drug Administration Web site. www.fda.gov/default.htm. Accessed February 12, 2017.
13. Centers for Disease Control and Prevention, Office for State, Tribal, Local and Territorial Support. *Public Health Law: Prescription Drug Time and Dosage Limit Laws*. Atlanta, GA: Centers for Disease Control and Prevention; 2015.
14. US Department of Justice, Drug Enforcement Administration, Office of Diversion Control. *Practitioner's Manual: An Informational Outline of the Controlled Substances Act*. Springfield, VA: Drug Enforcement Administration; 2006.
15. Stokowski L. APRN prescribing law: a state-by-state summary. Medscape Web site. www.medscape.com/viewarticle/440315. Published July 25, 2013. Accessed September 4, 2017.
16. Viola T, Carlson C, Trojian TH, Anderson J. A survey of state medical licensing boards: can the travelling team physician practice in your state? *Br J Sports Med.* 2013;47(1):60–62.
17. FAA Reauthorization Act of 2018, H.R. 302, 115th Cong (2018). <https://www.congress.gov/bill/115th-congress/house-bill/302/text>. Accessed October 28, 2018.
18. Center for Connected Health Policy: The National Telehealth Policy Resource Center. *State Telehealth Laws and Medicaid Program Policies*. Sacramento, CA: Center for Connected Health Policy; 2016.
19. Board of Certification. *BOC Standards of Professional Practice*. Omaha, NE: Board of Certification; 2016.
20. National Athletic Trainers' Association. *Athletic Training Education Competencies*. 5th ed. Dallas, TX: National Athletic Trainers' Association; 2011.
21. Courson R, Goldenberg, M, Adams KG, et al. Inter-association consensus statement on best practices for sports medicine management for secondary schools and colleges. *J Athl Train.* 2014;49(1):128–137.
22. Hinkson E, Mauter E, Wilson L, et al. *Medication Administration in the School Setting: Position Statement*. Silver Spring, MD: National Association of School Nurses; 2017.
23. Baulsir B, Inniss B. *Summary Matrix of State Laws Addressing Epi-Pen Use in Schools*. Edina, MN: Network for Public Health Law; 2015.

24. Commission on Accreditation of Athletic Training Education. *Standards for the Accreditation of Professional Athletic Training Programs*. Austin, TX: Commission on Accreditation of Athletic Training Education; 2013.
25. Oregon Health Authority. *Frequently Asked Questions (FAQs) for Naloxone*. Salem, OR: Oregon Health Authority; 2017.
26. Nickell R. Eight important principles for managing prescription medications in the athletic training room. National Athletic Trainers' Association Web site. www.nata.org/sites/default/files/principles-for-managing-prescription-medications-in-athletic-training-room.pdf. Accessed August 16, 2017.
27. Accreditation Association for Ambulatory Health Care. *2016 Accreditation Handbook for Medicare Deemed Status Surveys*. Skokie, IL: Accreditation Association for Ambulatory Health Care; 2016.
28. The Joint Commission. *Revisions to the Medication Management Standards Regarding Sample Medications*. Oakbrook Terrace, IL: The Joint Commission; 2014.
29. Sample medications: applicability of standards. The Joint Commission Web site. <https://www.jointcommission.org/standards-information/jcfaqdetails.aspx?StandardsFaqId=1083&ProgramId=46>. Accessed April 5, 2018.
30. Diehl J, Dean C, et al. *Guiding Principles for AT Policy and Procedure Development*. Omaha, NE: Board of Certification; 2017.
31. Kahanov L, Roberts J, Wughalter EM. Adherence to drug-dispensation and drug-administration laws and guidelines in collegiate athletic training rooms: a 5-year review. *J Athl Train*. 2010;45(3):299–305.
32. Illinois Department of Human Services, Illinois State Board of Education. *Recommendation Guidelines for Medication Administration in Schools*. Chicago, IL: State of Illinois; 2000.
33. Michigan Department of Education, Michigan Department of Community Health. *Administration of Medication in Schools*. Detroit, MI: State of Michigan; 2014.
34. US Department of Health and Human Services Food and Drug Administration Center for Drug Evaluation and Research Office of Compliance/OU DLC. *Prescription Requirement Under Section 503A of the Federal Food, Drug, and Cosmetic Act Guidance for Industry*. Silver Spring, MD: US Food and Drug Administration; 2016.
35. Human drug compounding progress report. US Food and Drug Administration Web site. <https://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/PharmacyCompounding/UCM536549.pdf>. Accessed October 23, 2017.
36. OTC drug facts label. US Food and Drug Administration Web site. www.fda.gov/drugs/resourcesforyou/consumers/ucm143551.htm. Updated June 5, 2015. Accessed October 24, 2018.
37. Legal requirements for the sale and purchase of drug products containing pseudoephedrine, ephedrine, and phenylpropanolamine. US Food and Drug Administration Web site. www.fda.gov/Drugs/DrugSafety/InformationbyDrugClass/ucm072423.htm. Updated September 13, 2016. Accessed February 27, 2017.
38. Jasos Group, LLC. *Boards of Pharmacy Regulating Physician Dispensing*. Lake Mary, FL: Jasos Group, LLC; 2014.
39. Food and Drugs: Records and Reports of Registrants: Maintenance of Records and Inventories. §21(II)(1304)(1304.04), 21 CFR (Updated 2014). https://www.deadiversion.usdoj.gov/21cfr/cfr/1304/1304_04.htm. Accessed October 24, 2018.
40. Import alert: oxygen units. US Food and Drug Administration Web site. www.accessdata.fda.gov/cms_ia/importalert_187.html. Published April 13, 2016. Accessed August 16, 2017.
41. Traveling with medication. US Department of State Overseas Security Advisory Council Web site. www.osac.gov/Pages/ContentReportDetails.aspx?cid=17386. Published January 1, 2017. Accessed August 14, 2017.
42. Hamburg M. New law enhances safety of compounded drugs and protection of the drug supply chain. US Food and Drug Administration Web site. <https://blogs.fda.gov/fdavoic/index.php/tag/drug-quality-and-security-act>. Published 2013. Accessed August 14, 2017.
43. Oregon Board of Pharmacy. *Oregon Board of Pharmacy Frequently Asked Questions*. Portland, OR: Oregon Board of Pharmacy; 2016.
44. Disposal of unused medicines: what you should know. US Food and Drug Administration Web site. www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/EnsuringSafeUseofMedicine/SafeDisposalofMedicines/ucm186187.htm. Updated August 11, 2017. Accessed September 10, 2017.
45. *Wallace v. Broyles*. AR 97-170 (Supreme Court of Arkansas 1998). <https://caselaw.findlaw.com/ar-supreme-court/1383918.html>. Accessed October 24, 2018.
46. Laster-Bradley M. Legal aspects of drug distribution in athletic training rooms. *Sports Med Stand Malprac Rep*. 1993;5:6–10.
47. Kahanov L, Furst D, Johnson S, Roberts J. Adherence to drug-dispensation and drug-administration laws and guidelines in collegiate athletic training rooms. *J Athl Train*. 2003;38(3):252–258.
48. Jenkins S, Maese R. Federal drug agents launch surprise inspections of NFL teams following games. *Washington Post* Web site. www.washingtonpost.com/sports/redskins/federal-drug-agents-launch-surprise-inspections-of-nfl-teams-following-games/2014/11/16/5545c84e-6da5-11e4-8808-afaa1e3a33ef_story.html. Published 2014. Accessed February 12, 2017.
49. Steinmeyer J. Pharmacological basis for the therapy of pain and inflammation with nonsteroidal anti-inflammatory drugs. *Arthritis Res*. 2000;2(5):379–385.
50. Dowell D, Haegerich T, Chou R. CDC guidelines for prescribing opioids for chronic pain. Centers for Disease Control and Prevention Web site. www.cdc.gov/drugoverdose/prescribing/guideline.html. Published 2015. Accessed February 12, 2017.
51. Schwartz V, Kolodny A. Cautious opioid prescribing in college athletes. National Collegiate Athletic Association Web site. www.ncaa.org/health-and-safety/sport-science-institute/cautious-opioid-prescribing-college-athletes. Published 2016. Accessed February 12, 2017.
52. New! Summary of NC's new opioids law, the STOP Act. North Carolina Medical Board Web site. www.ncmedboard.org/resources-information/professional-resources/publications/forum-newsletter/notice/new-summary-of-ncs-new-opioids-law-the-stop-act. Published June 29, 2017. Accessed April 5, 2018.

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